

# Astroinformatics and Computational Co-Design

Finding,  
Interrogating,  
and  
Understanding  
Cosmic  
Explosions

## Technical Innovations

- Co-designed High Performance Computing at the Sensor Sites.
- Real-Time Knowledge Extraction and Response
- Fault Tolerance in a Complex Global Network



- **Data-driven** computing research
- Tight **integration of storage, processing and networking** in a compact, scalable, and low-power platform
- Success will unleash revolutionary high-performance, **co-design capability for distributed database/data intensive computing applications**
- End-goal: collocation of significant preloaded data resources, with real-time data gathering resources and processing capability at the sensor, including remote and/or power-starved locations, at a level that has never before been achievable.

Building the Astroinformatics Competency: Finding, Interrogating, and Understanding Cosmic Explosions

